

REMARKS

Favorable reconsideration of this application in view of the above amendments and remarks to follow is respectfully requested. Since the present Response raises no new issues, and in any event, places the application in better condition for consideration on appeal, entry thereof is respectfully requested.

Before addressing the specific grounds of objections and rejections raised in the present Office Action, applicants have amended Claims 16, 17, 18 and 20 to include structural features rather than process features. Thus, applicants have amended Claims 16, 17, 18 and 20 to recite the elements of the inventive structure together with how those elements interrelate with each other. Applicants submit that support for the above amendments to the claims is found in the drawings of the present application. Applicants have also amended Claim 16 to positively recite that the fluorine content within the claimed fluorine doped low K dielectric oxide gate spacer is from about $1\text{E}14$ to $2\text{E}16\text{ cm}^{-2}$. Support for this amendment to Claim 16 is found at paragraph [0035] of the originally filed specification.

Applicants respectfully request entry of the above amendments and respectfully submit that the amendments are deemed necessary to include structural features to the claimed structure. Applicants respectfully submit that the above amendments were not previously made since the other attorney who handled the case failed to understand the criticality in including the structural limitations to the claims.

In the present Office Action, the drawings have been objected to since they allegedly do not contain the previously claimed well regions. Applicants observe that the above amendments to the claims make this drawing objection a moot point since the amended claims do not recite the presence of well regions. Applicants submit that well regions and their location within a semiconductor substrate are well known and one skilled in the art would understand where such

regions would be present in the substrate. Based on the above amendments and remarks, the drawing objection has been obviated.

Claims 16-18 and 20 stand rejected under 35 U.S.C. § 103 as allegedly unpatentable over the combined disclosures of U.S. Patent No. 6,482,726 to Aminpur, et al. ("Aminpur, et al.") and U.S. Patent No. 6,762,086 to Oh, et al. ("Oh, et al.").

Applicants respectfully submit that Claims 16-18 and 20 are not rendered obvious by the combined disclosures of Aminpur, et al. and Oh, et al. since none of the references teaches or suggests the claimed features recited in amended Claim 16. Specifically, the applied prior art references do not teach or suggest a MOSFET including a fluorine doped low K dielectric oxide gate spacer having a fluorine content of about $1\text{E}14$ to $2\text{E}16\text{ cm}^{-2}$ located on sidewalls of the gate stack. The principle reference spurring the obviousness rejection, i.e., Aminpur, et al., is defective since the applied reference does not teach or suggest the fluorine doped low K dielectric oxide spacers that have the claimed fluorine content. Applicants observe that Aminpur, et al. disclose at Col. 8, line 35 that spacers 1125 can be fluorine doped oxides, but the applied reference fails to teach or suggest applicants' claimed fluorine content. Applicants submit that in Aminpur, et al. the spacers 1125 are formed by deposition and etching. See Col. 8, lines 23-26. Applicants respectfully submit that spacers formed by deposition do not include the claimed fluorine content which is typically too high to be obtained merely by deposition. In the claimed invention, the spacers having the claimed fluorine content are formed utilizing an ion implantation process which introduces the said fluorine content into the spacers. The ion implantation occurs after deposition of the oxide material and etching thereof.

Oh, et al. do not alleviate the above defect in Aminpur, et al. since the applied secondary reference also does not teach or suggest the claimed fluorine doped low K dielectric oxide gate spacer having a fluorine content of about $1\text{E}14$ to $2\text{E}16\text{ cm}^{-2}$. Applicants observe that in Oh, et

al. the spacers 29b are dielectric spacers that are not disclosed to include fluorine, let alone the claimed fluorine content that is presently recited in amended Claim 16. As such, the combined disclosures of Aminpur, et al. and Oh, et al. do not render the claimed structure obvious.

The § 103 rejection also fails because there is no motivation in the applied references which suggest modifying the disclosed structures to include applicants' claimed fluorine content within the gate spacers. Thus, there is no motivation provided in the applied references, or otherwise of record, to make the modification mentioned above. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Vaeck, 947 F.2d, 488, 493, 20 USPQ 2d. 1438, 1442 (Fed.Cir. 1991).

The rejection under 35 U.S.C. § 103 has been obviated; therefore reconsideration and withdrawal thereof are respectfully requested.

Thus, in view of the foregoing amendments and remarks, it is firmly believed that the present case is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



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